This is a smaller species, measuring but 0.10 to the tips of its wings, and is tawny red, with the thorax tinged more or less with dusky, the antennæ with a broad black band towards their tips, the anterior wings more short and broad than in any of the other species, and hyaline with a broad smoky brown band on their tips, a spot back of the shoulder and some freckles near the margin also smoky brown, the veins, including the marginal, all white alternated with numerous black rings, the breast and hind breast blackish and the legs dusky brown tinged more or less with tawny vellow."

Miss Edith M. Patch has referred to this species several times and these references can be found in Van Duzee's catalogue. In *Pysche* (vol. XIX, p. 6,1912) Miss Patch places Provancher's *Livia bifasciata* as a synonym of *maculipennis*.

This insect which has commonly been known as the sedge psyllid has for its most conspicuous host a *Juncus* which is a plant belonging not to the "sedges" but to the "rushes", hence it might be called more correctly, the rush psyllid.

HEMIPTEROLOGICAL NOTES1.

By Roland F. Hussey, Forest Hills, Mass.

Ι. .

During the summers of 1920, 1921, 1922, I found a very agile species of Orthotylus abundant on the hollyhocks in the grounds of the University Observatory at Ann Arbor, Michigan. From June until late September, at least, adults and nymphs were numerous, occurring on the *upper* side of the leaves, and the plants showed plainly the effect of their work. At the time when I first collected this form, I was unable to identify it with any described species of the genus, but subsequently I

¹Contribution from the Entomological Laboratory of the Bussey Institution, Harvard University, No. 214.

discovered a description which applies perfectly to the specimens before me. This description appears to have been overlooked, and is not listed in Van Duzee's catalogue.

In 1891, A. J. Cook² gave an account of the hollyhock bug, and described and figured the species under the name "Orthotylus (Psallus) delicatus Uhler³." His description is quite ample for recognition of the species; and, inasmuch as the name he employs is merely one of Uhler's manuscript designations, the species must be known as Orthotylus delicatus Cook. Heidemann⁴ also records an Orthotylus delicatus Uhler MS, from the District of Columbia; but since his form occurred only on ash trees, while Cook's species, in my experience, is confined to hollyhocks, I doubt the identity of the two.

That the specimens taken by me at Ann Arbor belong to Cook's species is confirmed by examination of the specimens standing in the collection of the Michigan Agricultural College under the name Orthotylus delicatus Uhler, which Professor R. H. Pettit has kindly forwarded to me. Only two of these specimens were collected prior to the date of Cook's description, and I have therefore designated one of these as the lectotype of the species. The following redescription is drawn up from fresh material.

Orthotylus delicatus Cook.—Oblong-oval; green, the membrane smoky with the veins calloused, greenish or whitish; body sparsely clothed with white hairs, the dorsal parts also with short, thick, closely appressed black hairs. Length, $3\frac{1}{2}$ mm.

Head, with the eyes, very nearly $\frac{3}{4}$ as wide as the pronotum at base, and about twice as wide as long (in dorsal aspect); basal carina low and inconspicuous, vertex broadly flattened; clypeus, seen in profile, projecting beyond the frons by nearly the thickness of the basal antennal segment. Eyes occupying about one-half (19/36) of the vertical height of the head. Antennæ

²Bull. 76, Mich. Agr. Coll. Exper. Sta. p. 10. This bulletin is entitled "Kerosene Emulsions."

³This is not the *Psallus delicatus* Uhler 1887, described in Ent. Amer. iii, p. 34.

⁴Proc. Ent. Soc. Wash., ii. 1892, p. 226.

inserted near the lower angles of the eyes, yellowish or greenish, the fourth and sometimes the apical half of the third segments infuscated; all segments with short appressed hairs; ratio of lengths of segments, 20:77:68:32, the basal segment as long as

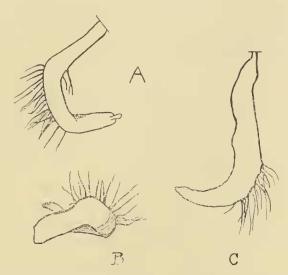


Fig. 1. Male genital claspers of *Orthotylus delicatus* Cook. A, right clasper, dorsal aspect; B, right clasper, lateral aspect; C, left clasper, dorsal aspect.

the dorsal aspect of the head, the second segment about one-fourth longer than the basal width of the pronotum. Rostrum yellow, its apex piceous, reaching onto the middle coxæ. Pronotum transverse, twice as wide as long, the lateral margins very lightly sinuate, the anterior angles broadly rounded; callosities distinct, joined anteriorly by a transverse elevation behind which are a pair of deeply impressed punctures; disk rather flat, the lateral submargin broadly impressed; anterior angles with a long seta directed obliquely outward and forward. Hemelytra rather short, the abdomen reaching to the middle of the cuneus (\circlearrowleft) or somewhat beyond its apex (\circlearrowleft) . Male genital claspers (Fig. 1) distinctive of the species.

Color: dorsal parts green in fresh specimens, fading after death to yellow on head, pronotum anteriorly, and scutellum; pectus

and venter greenish or yellowish; membrane smoky, the smaller areole and a small rounded spot next to the cuneus hyaline, the veins calloused, greenish, becoming white at the apex of the larger cell. Legs yellowish; tibiæ piceous at the extreme apex, the fore and middle tibiæ often greenish on the apical half; third segment of tarsi, often also the base of the first segment, piceous. Body rather sparsely clothed with white hairs, most conspicuous on the lateral margins of pronotum and hemelytra; dorsal parts (including head) also with conspicuous short black hairs which are flattened and deciduous.

Orthotylus (Psallus) delicatus Cook, 1891, Bull. 76, Mich Agr. Coll. Exper. Sta., p. 10, fig. 1 (manuscript name of Uhler).

This species is readily distinguished from the other American representatives of the genus Orthotylus by the character of the vestiture and the genital claspers.

II.

In my recent paper on Hemiptera from North Dakota⁵, there are two errors which require correction.

p. 9, line 27. In place of *Ischnodemus falicus* (Say), read *Ischnodemus hesperius* Parshley (1922, Bull. Brookl. Ent Soc., xvii, p. 123, = *I. brevicornis* Parshley, 1922, S. Dak. State College Techn. Bull. No. 2, p. 8; name preoccupied).

p. 10, line 28. In place of *Peritrechus fraternus* Uhler, read *Peritrechus saskatchewanensis* Barber (1918, Jl. N. Y. Ent. Soc., xxvi, p. 60).

5Occas. Papers Mus. Zool. Univ. Mich., No. 115, July 1, 1922.

III.

Dr. Bergroth has kindly called to my attention a reference which was omitted from my bibliographical notice on the Reduviid genus Triatoma⁶. In their "Textbook of Medical Entomology," Patton and Cragg (1913) give figures of *T. rubrofasciata* (Pl. LIX, fig. 1) and *T. megista* (Pl. LIX, fig. 2), of the eggs and nymphs of *T. rubrofasciata* (Pl. LX, fig. 2, 3, 5, 7), and some of the anatomical details of *T. rubrofasciata* (Pl. LXII, figs. 1, a, 1b, 5, 8, 10). They also give translations of Neiva's descriptions of some of his species, as follows;

p. 492. T. mexicana Neiva (as var. of rubrofasciata),

p. 494. T. sanguisuga ambigua Neiva, T. uhleri Neiva. T. neotomae Neiva.

p. 495. T. brasiliensis Neiva, T. flavida Neiva, T. heidemanni Neiva, T. occulata [sic] Neiva.

Descriptions are also given of *T. rubrofasciata* (p. 487), *T. megista* (p. 492), and *T. sanguisuga* (p. 493); and the bionomics of the genus are well treated (pp. 488-493). Throughout this treatment, Patton and Cragg use the name *Conorhinus* for the genus.

IV.

Stenopoda cinerea Laporte. This species was first described by Fabricius (1775) under the name Cimex culiciformis, and is antedated by Cimex culiciformis DeGeer (1773), a species now placed in the genus Ploiariodes. Laporte's name is the next available designation for the Fabrician species.

⁶Psyche, xxix, 1922, pp. 109-123.